

TABLE 7-continued

Emulsifying Agent Class	Sold under the Trademark	Commercial Source	HLB*	Stability Rating
tan monostearate sorbitan monostearate	Tween 60	"	14.9	100
	Span 60	"	4.7	70
Mixtures				
	Span 60 wt. %	Tween 60 wt. %		
	87	13	6	70
	68	32	8	100
	48	52	10	90
	28	72	12	100
	6	94	14	100

*HLB: Hydrophilic Lipophilic Balance

As can be seen from the above table, the high amylose starch systems provide stable emulsions with a wide variety of emulsifying agents and especially the emulsifying agents (and mixtures) rated at 100.

Obviously many modifications and variations of the invention, described herein above and in the claims, can be made without departing from the essence and scope thereof.

We claim:

1. A dry dietary food composition, for consumption mixed with water as an aqueous emulsion having improved stability, comprising, by dry wt., about from 3 to 40% of a nutritionally balanced peptide mixture, or amino acid supplemented peptide mixture, said peptide mixtures having a total amino acid profile sufficient to support normal human physiological functions; about from 2 to 35% lipid, said lipid containing sufficient linoleic acid or esters thereof, to provide said composition with a linoleic acid source content of at least 0.4%; about from 7.5 to 90% carbohydrate; about from 1 to 16% of a gelatinized high amylose starch, containing at least 50%, by wt., amylose; and about from 0.05 to 10% of a water-lipid emulsifying agent, and wherein said composition has a weight ratio of said high amylose starch to said lipid of at least 0.25, and wherein the total high amylose starch content of said composition is 16% or less and the total starch content is 20% or less and the total free amino acid content of said composition is less than 5%.

2. The composition of claim 1 wherein said total amino acid profile essentially corresponds to the amino acid profile of egg albumin.

3. The composition of claim 1 wherein said peptide-amino acid mixture is a protein hydrolysate.

4. The composition of claim 1 wherein said lipid has a mole ratio of unsaturated free fatty acids and triglycerides thereof, to saturated free acids and triglycerides thereof, greater than one.

5. The composition of claim 1 wherein said lipid is selected from the group consisting of corn oil, soy oil, safflower oil, sunflower oil and mixtures thereof.

6. The composition of claim 1 wherein said emulsifying agent is selected from the group consisting of emulsifying agents having a Hydrophilic Lipophilic Balance index of from 8 to 14.5; and mono and diglyceride emulsifying agent having an HLB of about from 3 to 3.6, and compatible mixtures thereof.

7. The composition of claim 6 wherein said emulsifying agent is selected from the group of diacetyl tartaric esters of monoglycerides; polyoxyethylene (20) sorbitan monostearate; mono and diglycerides having an HLB of from 3 to 3.6, and compatible mixtures thereof.

8. The composition of claim 7 wherein said emulsifying agent is selected from the group of diacetyl tartaric ester of monoglycerides having a saponification number of about from 405 to 425 and an Iodine Number of about from 60 to 70.

9. The composition of claim 1 wherein said carbohydrate is selected from the group consisting of disaccharides, trisaccharides, tetrasaccharides, oligosaccharides, dextrans, starch, and mixtures thereof.

10. The composition of claim 9 wherein said carbohydrate is selected from the group consisting of sucrose, 5 to 24 dextrose equivalent corn syrup solids; 5 to 42 dextrose equivalent dextrin solids and mixtures thereof.

11. The composition of claim 1 wherein said composition comprises about from 2 to 10%, by dry wt., of nutritional mineral salts.

12. The dry dietary food composition of claim 1 wherein said composition comprises, by dry wt., about from 4 to 22% of said nutritionally balanced peptide mixture, or amino acid supplemented peptide mixture, about from 4 to 22% of said lipid, about from 22 to 84% of said carbohydrate; and about from 2 to 8% of said gelatinized high amylose starch, about from 0.4 to 2% of said water-lipid emulsifying agent and wherein the total free amino acid content of said composition is less than 1.5%.

13. The composition of claim 12 wherein said amino acid residue-amino acid profile essentially corresponds to the amino acid profile of egg albumin.

14. The composition of claim 12 wherein said peptide-amino acid mixture is protein hydrolysate.

15. The composition of claim 12 wherein said lipid has a mole ratio of unsaturated free fatty acids and triglycerides thereof, to saturated free acids and triglycerides thereof, greater than one.

16. The composition of claim 12 wherein said emulsifying agent is selected from the group consisting of emulsifying agents having a Hydrophilic Lipophilic Balance Index of from 8 to 15.0; and mono and diglyceride emulsifying agent having a Hydrophilic Lipophilic Balance Index of about from 3 to 4, and compatible mixtures thereof.

17. The composition of claim 12 wherein said carbohydrate is selected from the group consisting of disaccharides, trisaccharides, tetrasaccharides, oligosaccharides, dextrans, starch, and mixtures thereof.

18. The composition of claim 12 wherein said composition comprises about from 2 to 10%, by dry wt., of nutritional mineral salts selected from the group consisting of the salts of calcium, potassium, sodium, phosphorous, magnesium, manganese, iron, copper, zinc, iodine and mixtures thereof.

19. The composition of claim 1 wherein about from 70 to 85%, by wt., of said lipid is composed of medium chain fatty acid triglycerides having from six through 12 carbon atoms in the fatty acid moiety thereof and mixtures of such triglycerides; and wherein said medium chain fatty acid triglyceride contains at least 95%, by wt., of fatty acid triglycerides from six through 10 carbon atoms in the fatty acid moiety thereof.

20. The composition of claim 19 wherein said lipid has a mole ratio of unsaturated free fatty acids and triglycerides thereof, to saturated free acids and triglycerides thereof, greater than one.

21. A dry dietary food composition, for consumption mixed with water as an aqueous emulsion having im-